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## EUROPEAN PATENT APPLICATION

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Covalent attachment of specific binding members to a solid phase.

The present invention provides novel methods for the covalent attachment of a specific binding member to a solid phase through the reaction of a thiolated solid phase and a specific binding member that is complexed to a heterobifunctional coupling agent. The resulting immobilized specific binding

member can be used in diagnostic binding assays. The invention enables the production of immobilized specific binding members which have increased sensitivity, specificity and stability, while requiring less specific binding member be used.

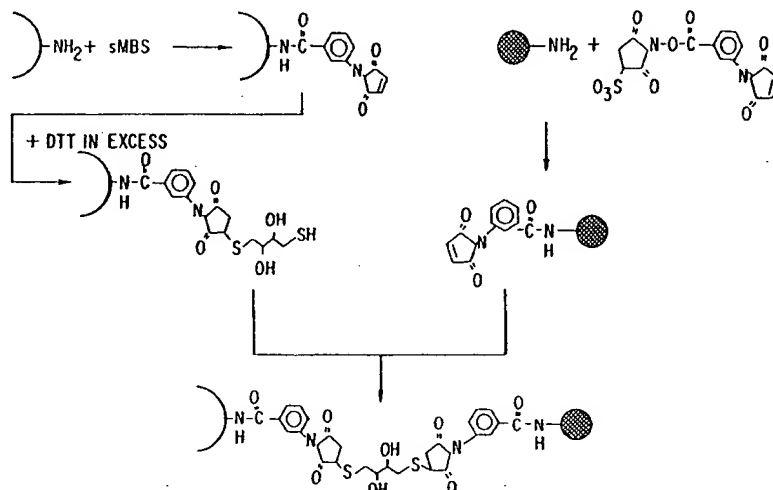


FIG. 7



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## EUROPEAN SEARCH REPORT

Application Number

EP 90 10 8317

| DOCUMENTS CONSIDERED TO BE RELEVANT   |   |  |  |
|---|---|--|--|
| Category  | Citation of document with indication, where appropriate, of relevant passages   | Relevant to claim                                    | CLASSIFICATION OF THE APPLICATION (Int. Cl.5)                        |
| X   | US-A-4529712 (Y-H. JOU ET AL.)<br>* the whole document *  | 1-17   | G01N33/547<br>//C12N11/06<br>//C07K17/06<br>//G01N33/569             |
| X   | US-A-4176006 (R.A. CORMIER ET AL.)<br>* the whole document *  | 7, 8   |  |
| X   | EP-A-227351 (SHIONOGI & CO. LTD.)<br>* the whole document *   | 1, 3, 5, 6   |  |
| X   | DE-A-2917001 (TOYO JOZO K.K.)<br>* the whole document *   | 5, 6   |  |
| X   | PATENT ABSTRACTS OF JAPAN<br>vol. 5, no. 8 (C-39)(680) 20 January 1981,<br>& JP-A-55 136261 (TOYO JOZO K.K.) 23 October 1980,<br>* the whole document * | 1-8  |  |
| A   | Derwent Publications Ltd., London, GB, DATABASE<br>WPIL, Accession no. 87-206289, week 8729,<br>& WO-A-8704171 (TEIJIN K.K.) 16-07-1987                 | 9, 10  |  |
| A   | EP-A-306943 (NEORX CORPORATION)<br>* page 5, line 55 - page 6, line 42 *<br>* page 7, line 45 - page 10, line 35 *                                      | 1-4, 7, 8, 11<br>13-15                               | TECHNICAL FIELDS<br>SEARCHED (Int. Cl.5)<br><br>G01N<br>C12N<br>C07K |
| D, P,<br>X  | EP-A-314127 (ABBOTT LABORATORIES)<br>* the whole document *   | 5-19   |  |
| The present search report has been drawn up for all claims  |   |  |  |
| Place of search<br>BERLIN   |   | Date of completion of the search<br>18 NOVEMBER 1991 | Examiner<br>DE KOK A.J.  |
| <b>CATEGORY OF CITED DOCUMENTS</b><br>X : particularly relevant if taken alone<br>Y : particularly relevant if combined with another document of the same category<br>A : technological background<br>O : non-written disclosure<br>P : intermediate document<br><br>T : theory or principle underlying the invention<br>E : earlier patent document, but published on, or after the filing date<br>D : document cited in the application<br>I : document cited for other reasons<br><br>& : member of the same patent family, corresponding document |   |  |  |